What is claimed is:

1. A semi-permanent hearing device adapted to be inserted entirely within a wearer's ear canal past the aperture thereof for long-term use therein, comprising:

a sealing retainer adapted to be seated in the bony portion of the ear canal along the longitudinal axis and in direct contact with the walls thereof when said device is fully inserted within the ear canal of the wearer;

a receiver assembly including a receiver for supplying acoustic signals processed by said device to the tympanic membrane of the wearer, said receiver assembly being arranged and adapted to mate with said retainer for positioning in the bony portion of the ear canal;

a microphone assembly including a microphone for receiving incoming acoustic signals for processing by said device;

a battery assembly including a battery for powering said device; and

a flexible connector electrically and mechanically connecting said battery assembly, said receiver assembly and said microphone assembly so that said microphone assembly is flexibly supported in the cartilaginous portion of the ear canal to be substantially non-occluding therein with minimal or no contact with the walls thereof, whereby to avoid substantial interference by said microphone assembly with hair and production of cerumen and debris within said ear canal.

2. The semi-permanent hearing device of claim **1**, wherein said battery assembly includes a thin enclosure substantially conforming to the shape of said battery, said enclosure encapsulating and supporting said battery therein.

3. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is sufficiently soft and yielding to conform itself to the shape of the ear canal in said bony portion for long-term retention in a seated position therein when said device is fully inserted into the ear canal.

4. The semi-permanent hearing device of claim **1**, wherein said sealing retainer includes a cavity to accept said receiver assembly in mating relationship therewith.

5. The semi-permanent hearing device of claim **2**, wherein each of said receiver assembly and said microphone assembly includes a respective thin enclosure encapsulating said receiver and said microphone respectively, whereby, together with said thin enclosure of said battery assembly, to inhibit contamination and damage of said device.

6. The semi-permanent hearing device of claim **5**, wherein each of said thin enclosures is moisture-proof.

7. The semi-permanent hearing device of claim **5**, wherein each of said thin enclosures has a wall thickness not exceeding 0.3 mm.

8. The semi-permanent hearing device of claim **1**, wherein each of said receiver and said microphone has a port for passage of the respective acoustic signal therethrough, and further including at least one debris guard for mating with at least one of said microphone and said receiver without substantial interference with passage of said acoustic signal through the respective port.

9. The semi-permanent hearing device of claim **8**, wherein said at least one debris guard is moisture proof.

10. The semi-permanent hearing device of claim **8**, wherein said at least one debris guard is substantially acoustically transparent.

11. The semi-permanent hearing device of claim **8**, wherein said at least one debris guard comprises a replaceable cap.

12. The semi-permanent hearing device of claim **11**, wherein said replaceable cap comprises a body member and guard member.

13. The semi-permanent hearing device of claim **8**, wherein said at least one debris guard comprises an adhesive pad incorporating an adhesive.

14. The semi-permanent hearing device of claim **8**, wherein said at least one debris guard is removable and disposable for replacement thereof.

15. The semi-permanent hearing device of claim **1**, wherein said support of said microphone assembly via said connector is sufficiently flexible to enable movement of said microphone assembly in response to pressures from sources including physiologic debris collected in said ear canal and canal deformations associated with movements of said ear canal.

16. The semi-permanent hearing device of claim **1**, wherein said receiver assembly includes an air vent.

17. The semi-permanent hearing device of claim **1**, wherein said sealing retainer includes an air vent.

18. The semi-permanent hearing device of claim **1**, further including a reed-switch assembly coupled to said device for magnetically-induced remote power switching or control of said device.

19. The semi-permanent hearing device of claim **18**, wherein said reed-switch assembly includes a miniature latching magnet to enable latching of said reed-switch assembly.

20. The semi-permanent hearing device of claim **1**, further including means associated with said device for remote power switching or control of said device.

21. The semi-permanent hearing device of claim **20**, wherein said means for remote power switching or control of said device comprises an external control magnet sized to be hand-held.

22. The semi-permanent hearing device of claim **21**, wherein said external control magnet is bar-shaped.

23. The semi-permanent hearing device of claim **1**, wherein said microphone assembly includes amplifier means integral therewith for processing said incoming signal.

24. The semi-permanent hearing device of claim **1**, wherein said flexible connector comprises a thin film circuit.

25. The semi-permanent hearing device of claim **24**, wherein said thin film

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circuit comprises a main section associated with said battery assembly, a medial section associated with said receiver assembly, and a lateral section associated with said microphone assembly.

26. The semi-permanent hearing device of claim **25**, wherein said medial and lateral sections are bendable with respect to said main section.

27. The semi-permanent hearing device of claim **1**, wherein said flexible connector includes electrically conductive pads for connection to terminals of said battery.

28. The semi-permanent hearing device of claim **1**, wherein said flexible connector includes a crossing section for connection to a crossing terminal of said battery.

29. The semi-permanent hearing device of claim **1**, further including manually adjustable control means for adjusting at least one electroacoustic parameter of said device.

30. The semi-permanent hearing device of claim **29**, wherein said manually adjustable control means includes at least one electrical jumper for enabling said adjustment.

31. The semi-permanent hearing device of claim **1**, including programming means for selectively adjusting electroacoustic parameters of said device.

32. The semi-permanent hearing device of claim **31**, wherein said programming means includes a programmer external to said device and adjustment means internal to said device responsive to programming signals from said programmer for performing said selective adjustment.

33. The semi-permanent hearing device of claim **32**, wherein said programmer includes an electrical cable for connection to said device for delivering said programming signals to said internal adjustment means.

34. The semi-permanent hearing device of claim **32**, wherein said programmer and said internal adjustment means include means for remote programming of said device by delivery of said programming signals without a physical connection therebetween.

35. The semi-permanent hearing device of claim **34**, wherein said remote programming means includes means for transmitting and receiving at least one of sound, ultrasound, magnetic, electromagnetic, radio frequency and infrared signals as said programming signals.

36. The semi-permanent hearing device of claim **1**, including measuring means for performing in-situ probe tube measurements of parameters of said device.

37. The semi-permanent hearing device of claim **3**, wherein said sealing retainer is composed of a compressible material.

38. The semi-permanent hearing device of claim **37**, wherein said compressible material is responsive to compression thereof to undergo delayed expansion over time to assume a snug fit within said ear canal.

39. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is made of polyurethane foam or like material.

40. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is made of silicone or like material.

41. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is removable from said device and disposable for replacement thereof.

42. The semi-permanent hearing device of claim **4**, wherein said cavity is positioned in said sealing retainer coaxially with an axis to substantially coincide with the longitudinal axis of the ear canal in the bony portion thereof when said device is fully inserted into the ear canal, whereby to support said receiver assembly along said longitudinal axis in the vicinity of the tympanic membrane of the wearer.

43. The semi-permanent hearing device of claim **4**, wherein said cavity is medially shaped to conform at least partially to said battery assembly for acceptance thereof.

44. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is configured to be fully seated in the bony portion of the ear canal by conforming itself to the walls thereof, whereby to provide acoustic sealing within said bony portion for preventing said acoustic signals emanating from said receiver from feeding back to said microphone.

45. The semi-permanent hearing device of claim **1**, wherein said sealing retainer is one among an assortment of sealing retainers of different sizes and shapes supplied with said hearing device to accommodate the dimensions of the ear canal of the individual wearer.

46. The semi-permanent hearing device of claim **1**, wherein said battery is a button cell type battery.

47. The semi-permanent hearing device of claim **2**, wherein said battery is removable from said thin enclosure for disposal when battery replacement is required.

48. The semi-permanent hearing device of claim **2**, wherein said battery assembly is removable from said device for disposal when battery replacement is required.

49. The semi-permanent hearing device of claim **1**, wherein said receiver assembly protrudes medially beyond said sealing retainer.

50. A semi-permanent hearing device adapted to be inserted entirely within a wearer's ear canal past the aperture thereof for long-term use therein, comprising:

a sealing retainer adapted to be seated in the bony portion of the ear canal along the longitudinal axis and in direct contact with the walls thereof when said device is fully inserted within the ear canal of the wearer;

a receiver assembly including a receiver for supplying acoustic signals processed by said device to the tympanic membrane of the wearer, said receiver assembly mating with said sealing retainer for positioning said receiver in the bony portion of the ear canal;

a microphone assembly including a microphone for receiving incoming acoustic signals for processing by said device;

a battery assembly including a battery for powering said device, a thin enclosure, and a connector electrically connecting said battery, said receiver and said microphone;

said battery assembly having a shape substantially equivalent to the shape of said battery therein, and said microphone assembly extending laterally for positioning in the cartilaginous portion of the ear canal with minimal or no contact with the walls for substantial non-occlusion thereof, thereby minimally interfering with hair and production of cerumen and debris within said ear canal.

51. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is sufficiently soft and yielding to conform itself to the shape of the ear canal in said bony portion for long-term retention in a seated position therein when said device is fully inserted into the ear canal.

52. The semi-permanent hearing device of claim **50**, wherein said sealing retainer includes a cavity to accept said receiver assembly in mating relationship therewith.

53. The semi-permanent hearing device of claim **50**, wherein each of said receiver assembly and said microphone assembly includes a respective thin enclosure encapsulating said receiver and said microphone respectively, whereby, together with said thin

enclosure of said battery assembly, to inhibit contamination and damage of said device.

54. The semi-permanent hearing device of claim **53**, wherein each of said thin enclosures is moisture-proof.

55. The semi-permanent hearing device of claim **53**, wherein each of said thin enclosures has a wall thickness not exceeding 0.3 mm.

56. The semi-permanent hearing device of claim **50**, wherein each of said receiver and said microphone has a port for passage of the respective acoustic signal therethrough, and further including at least one debris guard for mating with at least one of said microphone and said receiver without substantial interference with passage of said acoustic signal through the respective port.

57. The semi-permanent hearing device of claim **56**, wherein said at least one debris guard is moisture proof.

58. The semi-permanent hearing device of claim **56**, wherein said at least one debris guard is substantially acoustically transparent.

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59. The semi-permanent hearing device of claim 56, wherein said at least one debris guard comprises a replaceable cap.

60. The semi-permanent hearing device of claim 59, wherein said replaceable cap comprises a body member and guard member.

61. The semi-permanent hearing device of claim 56, wherein said at least one debris guard comprises an adhesive pad incorporating an adhesive.

62. The semi-permanent hearing device of claim 56, wherein said at least one debris guard is removable and disposable for replacement thereof.

63. The semi-permanent hearing device of claim 50, wherein said microphone assembly is flexibly connected to enable movement thereof in response to pressures from sources including physiologic debris collected in said ear canal and canal deformations associated with movements of said ear canal.

64. The semi-permanent hearing device of claim 50, wherein said receiver assembly includes an air vent.

65. The semi-permanent hearing device of claim **50**, wherein said sealing retainer includes an air vent.

66. The semi-permanent hearing device of claim **50**, further including a reed-switch assembly coupled to said device for magnetically-induced remote power switching or control of said device.

67. The semi-permanent hearing device of claim **66**, wherein said reed-switch assembly includes a miniature latching magnet to enable latching of said reed-switch assembly.

68. The semi-permanent hearing device of claim **50**, further including means associated with said device for remote power switching or control of said device.

69. The semi-permanent hearing device of claim **68**, wherein said means for remote power switching or control of said device comprises an external control magnet sized to be hand-held.

70. The semi-permanent hearing device of claim **69**, wherein said external control magnet is bar-shaped.

71. The semi-permanent hearing device of claim 50, wherein said microphone assembly includes amplifier means integral therewith for processing said incoming signal.

72. The semi-permanent hearing device of claim 50, wherein said connector comprises a thin film circuit.

73. The semi-permanent hearing device of claim 72, wherein said thin film circuit comprises a main section associated with said battery assembly, a medial section associated with said receiver assembly, and a lateral section associated with said microphone assembly.

74. The semi-permanent hearing device of claim 73, wherein said medial and lateral sections are bendable with respect to said main section.

75. The semi-permanent hearing device of claim 50, wherein said connector includes electrically conductive pads for connection to terminals of said battery.

76. The semi-permanent hearing device of claim 50, wherein said connector includes a crossing section for connection to a crossing terminal of said battery.

77. The semi-permanent hearing device of claim **50**, further including manually adjustable control means for adjusting at least one electroacoustic parameter of said device.

78. The semi-permanent hearing device of claim **77**, wherein said manually adjustable control means includes at least one electrical jumper for enabling said adjustment.

79. The semi-permanent hearing device of claim **50**, including programming means for selectively adjusting electroacoustic parameters of said device.

80. The semi-permanent hearing device of claim **79**, wherein said programming means includes a programmer external to said device and adjustment means internal to said device responsive to programming signals from said programmmer for performing said selective adjustment.

81. The semi-permanent hearing device of claim **80**, wherein said programmer includes an electrical cable for connection to said device for delivering said programming signals to said internal adjustment means.

82. The semi-permanent hearing device of claim **80**, wherein said programmer and said internal adjustment means include means for remote programming of said device by delivery of said programming signals without a physical connection therebetween.

83. The semi-permanent hearing device of claim **82**, wherein said remote programming means includes means for transmitting and receiving at least one of sound, ultrasound, magnetic, electromagnetic, radio frequency and infrared signals as said programming signals.

84. The semi-permanent hearing device of claim **50**, including measuring means for performing in-situ probe tube measurements of parameters of said device.

85. The semi-permanent hearing device of claim **51**, wherein said sealing retainer is composed of a compressible material.

86. The semi-permanent hearing device of claim **85**, wherein said compressible material is responsive to compression thereof to undergo delayed expansion over time to assume a snug fit within said ear canal.

87. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is made of polyurethane foam or like material.

88. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is made of silicone or like material.

89. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is removable from said device and disposable for replacement thereof.

90. The semi-permanent hearing device of claim **52**, wherein said cavity is positioned in said sealing retainer coaxially with an axis to substantially coincide with the longitudinal axis of the ear canal in the bony portion thereof when said device is fully inserted into the ear canal, whereby to support said receiver assembly along said longitudinal axis in the vicinity of the tympanic membrane of the wearer.

91. The semi-permanent hearing device of claim **52**, wherein said cavity is medially shaped to conform at least partially to said battery assembly for acceptance thereof.

92. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is configured to be fully seated in the bony portion of the ear canal by conforming itself to the walls thereof, whereby to provide acoustic sealing within said bony portion for preventing said acoustic signals emanating from said receiver from feeding back to said microphone.

93. The semi-permanent hearing device of claim **50**, wherein said sealing retainer is one among an assortment of sealing retainers of different sizes and shapes supplied with said hearing device to accommodate the dimensions of the ear canal of the individual wearer.

94. The semi-permanent hearing device of claim **50**, wherein said battery is a button cell type battery.

95. The semi-permanent hearing device of claim **50**, wherein said battery is removable from said thin enclosure for disposal when battery replacement is required.

96. The semi-permanent hearing device of claim **50**, wherein said battery assembly is removable from said device for disposal when battery replacement is required.

97. The semi-permanent hearing device of claim **50**, wherein said receiver assembly protrudes medially beyond said sealing retainer.

98. A semi-permanent hearing device adapted to be inserted entirely within a wearer's ear canal past the aperture thereof for long-term use therein, comprising:

a core assembly comprising

transducer means for converting sound waves incident thereon to audible acoustic signals for imparting thereof on the tympanic membrane of the wearer, and

a battery for powering said core assembly;

a sealing retainer fabricated to seat within and occlude the bony region of the ear canal when said device is fully inserted within the ear canal of the wearer, said sealing retainer including means for snugly supporting said core assembly along the longitudinal axis of the ear canal in said bony region, whereby said sealing retainer provides acoustic sealing of said bony region of the ear canal to prevent feedback, said core assembly including an extended portion extending laterally and non-occludingly into the cartilaginous region of the ear canal with minimal or no contact of the ear canal wall therein, whereby to substantially avoid interference by said extended portion of said core assembly with hair and production of cerumen and debris in said cartilaginous region.

99. The semi-permanent hearing device of claim **98**, wherein said core assembly and said sealing retainer are selectively separable from one another for disposal of said sealing retainer.

100. The semi-permanent hearing device of claim **98**, wherein said sealing retainer is sufficiently soft and yielding to conform itself to the shape of the ear canal in said bony region for long-term retention in a seated position therein when said device is fully inserted into the ear canal.

101. The semi-permanent hearing device of claim **98**, wherein said sealing retainer comprises an air cavity to accept said core assembly for snug support thereof.

102. The semi-permanent hearing device of claim **98**, further comprising moisture-proof encapsulation of said device.

103. The semi-permanent hearing device of claim **102**, wherein said encapsulation has a wall thickness not exceeding 0.3 mm.

104. The semi-permanent hearing device of claim **98**, wherein said transducer means includes a microphone and a receiver each having a respective port for passage of acoustic signal therethrough, and further including at least one debris guard for at least one of said microphone port and said receiver port without substantial interference to passage of acoustic signal through the respective port.

105. The semi-permanent hearing device of claim **104**, wherein said at least one debris guard is moisture proof.

106. The semi-permanent hearing device of claim **104**, wherein said at least one debris guard is substantially acoustically transparent.

107. The semi-permanent hearing device of claim **104**, wherein said at least one debris guard comprises a replaceable cap.

108. The semi-permanent hearing device of claim **107**, wherein said replaceable cap comprises a body member and guard member.

109. The semi-permanent hearing device of claim **104**, wherein said at least one debris guard comprises an adhesive pad incorporating an adhesive.

110. The semi-permanent hearing device of claim **104**, wherein said at least one debris guard is removable and disposable for replacement thereof.

111. The semi-permanent hearing device of claim **98**, wherein said core assembly comprises an air vent.

112. The semi-permanent hearing device of claim **98**, wherein said transducer means comprises a microphone assembly including amplifier means integral therewith for processing acoustic signals.

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113. The semi-permanent hearing device of claim **98**, further including manually adjustable control means for adjusting at least one electroacoustic parameter of said device.

114. The semi-permanent hearing device of claim **98**, including programming means for selectively adjusting electroacoustic parameters of said device.

115. The semi-permanent hearing device of claim **114**, wherein said programming means includes a programmer external to said device and adjustment means internal to said device responsive to programming signals from said programmmer for performing said selective adjustment.

116. The semi-permanent hearing device of claim **100**, wherein said sealing retainer is composed of a compressible material.

117. The semi-permanent hearing device of claim **116**, wherein said compressible material is responsive to compression thereof to undergo delayed expansion over time to assume a snug fit within said ear canal.

118. The semi-permanent hearing device of claim **98**, wherein said sealing retainer is made of polyurethane foam or like material.

119. The semi-permanent hearing device of claim **98**, wherein said sealing retainer is made of silicone or like material.

120. The semi-permanent hearing device of claim **98**, wherein said sealing retainer is removable from said device and disposable for replacement thereof.

121. The semi-permanent hearing device of claim **98**, wherein said sealing retainer is one among an assortment of sealing retainers of different sizes and shapes supplied with said hearing device to accommodate the dimensions of the ear canal of the individual wearer.

122. The semi-permanent hearing device of claim **98**, wherein said core assembly is disposable.

123. The semi-permanent hearing device of claim **98**, wherein said transducer means comprises a receiver assembly protruding medially beyond said sealing retainer.

124. The semi-permanent hearing device of claim **98**, wherein said hearing device further comprises a removal handle.

125. A sealing retainer for use with a semi-permanent hearing device adapted to be inserted entirely within the ear canal of a wearer past the aperture thereof, wherein:

said sealing retainer is configured (i) for concentric positioning over a medial part of a core assembly of the hearing device so that said core assembly extends laterally within and makes minimal or no contact with the walls of the cartilaginous region of said ear canal and is suspended within and snugly supported at said medial part by said sealing retainer, and (ii) for seating within and occluding the bony region of the ear canal, when said hearing device is fully inserted within the ear canal of the wearer,

whereby said sealing retainer provides acoustic sealing of said bony region to prevent feedback, and said lateral extension of said core assembly avoids substantial interference with hair and production of cerumen and debris in said cartilaginous region.

126. The sealing retainer of claim **125**, wherein said sealing retainer is sufficiently soft and yielding to conform itself to the shape of the ear canal in said bony region.

127. The sealing retainer of claim **125**, wherein said sealing retainer is composed of a compressible material.

128. The sealing retainer of claim **127**, wherein said compressible material is responsive to compression thereof to undergo delayed expansion over time to assume a snug fit within said ear canal.

129. The sealing retainer of claim **125**, wherein said sealing retainer is made of polyurethane foam or like material.

130. The sealing retainer of claim **125**, wherein said sealing retainer is made of silicone or like material.

131. The sealing retainer of claim **125**, wherein said sealing retainer is disposable.

132. The sealing retainer of claim **125**, wherein said sealing retainer includes an air cavity.

133. The sealing retainer of claim **125**, wherein said sealing retainer is assortedly sized and shaped to accommodate the dimensions of the ear canal of said wearer.

134. The sealing retainer of claim **125**, wherein said sealing retainer is configured to have said core assembly protrude medially therefrom when suspended and supported thereby.

135. The sealing retainer of claim **125**, wherein said sealing retainer is worn

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alone without said core assembly for testing a hearing-impaired individual's tolerance for long-term wearing of said sealing retainer and associated said hearing device.

136. The sealing retainer of claim **125**, wherein the cross-section of said sealing retainer is oval in shape.

137. The sealing retainer of claim **136**, wherein said sealing retainer is relatively pointed at its inferior portion.

138. A method of testing a hearing-impaired individual's tolerance to long-term wearing of a canal hearing device inserted entirely within the individual's ear canal past the aperture thereof without actual wearing of the entire hearing device, said method comprising the steps of:

inserting into said ear canal a sealing retainer configured to conform to the walls in the bony region of said ear canal until said sealing retainer is seated securely against said walls in said bony region, wherein said sealing retainer has an air cavity normally adapted to accept and retain a core assembly of said hearing device but said insertion step is performed with said air cavity unoccupied by said core assembly, and

removing said sealing retainer from said ear canal after said sealing retainer has been worn by said individual for a period of time of sufficient length to determine said long-term tolerance.

139. The method of claim **138**, further including the step of examining said ear canal after removal of said sealing retainer therefrom.

140. The method of claim **138**, further including the step of maintaining an inventory of assorted sizes and shapes of said sealing retainer for selection of an appropriate fit for the ear canal of said individual.